

Title of the invention: METHOD FOR FABRICATING A FIBER LENS

Abstract Of the Disclosure

[0034] The invention is directed to a method for fabricating a fiber lens,
5 comprising: (a)stripping proper length of the coating layer of a fiber to form a
bare fiber portion; (b)cleaning the bare fiber portion; (c)fixing the fiber into a
ferrule included in a holder; (d)providing a container filled with a layer of
hydrofluoride, a layer of oil and a middle mixed layer; (e)immersing the bare
fiber portion in the container, wherein the bare fiber portion is etched by the
10 layer of hydrofluoride and the fiber is perpendicular to the surface of the layer
of oil to form a cone; (f)melting the cone by a plurality of electric arcs to form
a fiber lens; and (g)adjusting the relative position between the electric arcs and
the cone to form the desired curvature and shape of the fiber lens.